

II. REMARKS

Claims 1, 2, 4-7, 9-13, 15-17, 23 and 24 are pending in the above-identified application and stand variously rejected. Claims 3, 5, 8, 14, 18-22 were previously canceled. By this Amendment and response, claims 1 and 24 have been amended. Support for the amendments to claim 1 and 24 is found in the application papers on page 4, lines 3 to 21; page 5, lines 18 to 27; page 17, lines 1 and 2 and page 17, line 26 to page 19, line 29. An issue of new matter is not raised by these amendments and entry thereof is respectfully requested. The amendments to claims 1 and 24 are made without prejudice or disclaimer and are not intended to be a dedication to the public of the subject matter of the claims as previously presented.

In view of the preceding amendments and the remarks which follow, reconsideration and removal of the rejections set forth in the Final Office Action is respectfully requested.

Applicant previously filed a response which the Office deemed non-compliant for failure to list all claims, including canceled claims. Because the subject application is in after final status, this complete substitute amendment and response must be filed by Applicant.

Examiner Interview

Applicant's undersigned attorney thanks the Examiner for the courtesy extended to her during the March 31, 2005 telephonic interview. Although an agreement as to claim language as compared to the teachings of the prior art was not reached, Applicant's attorney believes that the interview was helpful to resolve the outstanding issues remaining in the subject application.

Applicant's representative and the Examiner discussed the Peymen patent (U.S. Patent No. 5,964,748) and its application to the claims. Applicant's representative distinguished Peymen based on the remarks set forth *infra*, however, the Office did not comment on whether Applicant's remarks and claim amendments would remove the grounds for rejection.

35 U.S.C. § 102(e)

Claims 1, 2, 11 and 15-17 stand rejected under 35 U.S.C. § 102(e) as allegedly anticipated by Peyman, U.S. Patent No. 5,964,748 (the '748 Patent). The Office alleged that claim 1 and others are anticipated by the language of the '748 Patent, in particular: the embodiment of Figures 37-45 (column 15, line 30 et seq.), a small incision 418 is cut in the anterior surface of the cornea (column 15, lines 42-47), a circular channel originating at one side of the incision 418 is created (column 17, lines 19-31), the circular channel is widened in certain locations to accommodate a ring of non-uniform cross-section (column 18, lines 4-11; column 13, lines 30-39; column 3, lines 58-61; column 17, lines 28-31; column 21, lines 46-49), and the intracorneal implant 430 is introduced into the widened channel through the small incision 418 (column 16, lines 63-67). The Office alleged that the distance from the exposed side of the incision 418 to the circular channel can be 1.5 mm or even less (column 15, lines 43-46; column 17, lines 36-38). The Office noted as another example, in the embodiment depicted in Figure 89 (column 29, lines 45-58), a relatively small accurate slit 1118^{'''} is formed in the exterior surface of the cornea 1112, a circular intracorneal channel 1120^{'''} is created, the circular channel is widened (column 29, lines 54-55), and "an ocular implant can be inserted into the annular pocket" (column 29, lines 56-57). Regarding claim 2, the Office noted column 17, lines 36-40; column 12, lines 35-37; and Figures 41-45. Regarding claims 16 and 17, the Office noted column 16, line 63, through column 17, line 5.

The Office alleged that the circular channel shown in Peyman is widened in certain locations to accommodate a ring of non-uniform cross-section citing column 18, lines 4-11; column 13, lines 30-39; column 3, lines 58-61; column 17, lines 28-31; column 21, lines 46-49, and the intracorneal implant 430 is introduced into the widened channel through the small incision 418 (column 16, lines 63-67). The Office also directed Applicant to Figure 89 (column 29, lines 45-58), wherein a relatively small accurate slit 1118^{'''} is formed in the exterior surface of the cornea 1112, a circular intracorneal channel 1120^{'''} is created, the circular channel is widened (column 29, lines 54-55), and "an ocular implant can be inserted into the annular pocket" (column 29, lines 56-57).

Applicant respectfully traverses. Applicant does not claim a procedure or implant that requires removal of corneal tissue prior to the insertion of an implant. Amended claim 1 and its dependants now more clearly point out that Applicant's method corrects defects in vision by cutting a small incision in the anterior surface of the cornea, without tissue ablation of the eye. The '748 Patent, in contrast, teaches ablation or removal of eye tissue to correct vision. Thus, because the '748 Patent does not teach each and every element of the claims, the rejection is improper and therefore should be removed.

35 U.S.C. § 103

Claims 6, 13, 23 and 24 stand rejected under 35 U.S.C. § 103 as allegedly obvious the '748 patent. The Office argued that side legs as set forth in instant claims 6, 8, and 13 would have been obvious from column 13, lines 32-35, and column 15, lines 64-66, in order to accommodate the shape of the ocular material 430 (column 17, lines 28-31; Figure 42), with further motivation having been provided by Figures 27 and 36. Regarding claim 24, the Office alleged that tool 450 being arc-shaped would have been obvious in order to match the circular shape of the pocket 426 and/or a curved incision (column 15, lines 43-44).

Applicant respectfully traverses. Claims 6 and 13 are directed to a method of claim 1, wherein the intracorneal channel is widened without tissue ablation by inserting a channel-widening dissector blade with a side leg (claim 6) and rotating the blade and side leg to form the channel and pocket (claim 13). Claims 23 and 24 are directed to a method for inserting an intracorneal continuous ring implant in the cornea of the eye by creating a small incision in the cornea of the eye and forming a pocket in the cornea without tissue ablation. The implant is then inserted into the eye (claim 24) and it can be folded prior to insertion (claim 23).

As noted in Applicant's rebuttal of the rejection of the claims under 35 U.S.C. § 102(e), the methods disclosed in the '748 Patent require tissue ablation. In contrast, Applicant's method does not require cutting of tissue. Because the tissue is not cut, the eye is not traumatized and scar tissue does not form. Not only is excessive trauma to the eye avoided by Applicant's method, but also the procedure claimed by Applicant can be reversed. (See page 9, lines 8 to 12 of Applicant's specification.)

Claims 4, 5, 7, 9, 10 and 12 stand rejected under 35 U.S.C. § 103, as allegedly unpatentable over Peyman (the '748 Patent) in view of Mathis et al., U.S. Patent No. 5,846,256. The Office argued that to employ the clockwise and counter-clockwise dissectors and channel connectors taught in Mathis et al. would have been obvious in order to provide better matching of the circular intracorneal channel dimension with those of the ring implant 430 of the '748 Patent, with further motivation to use complementally shaped tools having been provided by column 17, lines 19-22, 28-31, 39-42 and 49-51 of the '748 Patent.

Applicant respectfully traverses. Claims 4, 5, 7, 9, 10 and 12 each depend directly or indirectly from claim 1. Applicant re-asserts and incorporates by reference the remarks in response to the rejections under 35 U.S.C. § 102(e). The rejected claims are not taught or suggested by the primary reference (the '748 Patent) because the Patent fails to teach or suggest the creation of a circular intracorneal channel without tissue ablation. The secondary reference, Mathis et al., U.S. Patent No. 5,846,256, fails to shore up the deficiencies of the '748 Patent. Additionally, Applicant's claimed methods provide advantages over the cited art because Applicant's methods do not require cutting of tissue. Because the tissue is not cut, the eye is not traumatized and scar tissue does not form. Not only is excessive trauma to the eye avoided by Applicant's method, but also the procedure is reversible and the implant can be removed.


For these reasons, the rejection is improper and Applicant respectfully requests its withdrawal.

III. CONCLUSION

The Commissioner is hereby authorized to charge any additional fees which may be required by this paper, or credit any overpayment to Deposit Account No. 50-2518, referencing billing no.: 2023915-7004262001. If a telephone interview would advance the prosecution of this application, the Examiner is invited to telephone the undersigned attorney at the number provided below.

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